

CLAIMS

1. A metal chelate compound of Formula (1) or a salt thereof:

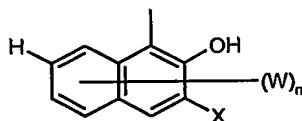


Formula (1)

wherein:

A is an optionally substituted pyridyl ring; and

10 B is of the Formula (2):



Formula (2)

wherein:

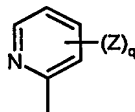
X and W are substituents other than H;

M is a metal chelated to A-N=N-B; and

15 n is 0 to 4.

2. A compound according to claim 1 wherein :

A is of the Formula (3):



Formula (3)

20 wherein:

q is 0, 1, 2, 3 or 4; and

each Z independently is a substituent other than H.

3. A compound according to either claim 1 or 2 wherein W, X and Z are each  
 25 independently selected from CF<sub>3</sub>, -OH, -Br, -Cl, -F, -CN, -NO<sub>2</sub>, phosphoric acid, sulpho, optionally substituted phosphoramidate, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, -SR<sup>1</sup>, -SO<sub>2</sub>R<sup>1</sup>, -SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -SOR<sup>1</sup>, -OR<sup>1</sup>, -C(O)R<sup>1</sup>, -C(O)OR<sup>1</sup>, -C(O)NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>R<sup>3</sup> or -NHCOR<sup>1</sup>, wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are each

independently H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl or optionally substituted aralkyl.

4. A compound according to any one of the preceding claims wherein Z is selected from -SH, carboxy, cyano, halo, nitro, C<sub>1-6</sub>-alkoxy or C<sub>1-4</sub>-alkyl, optionally substituted by hydroxy, carboxy, halo or cyano group(s).

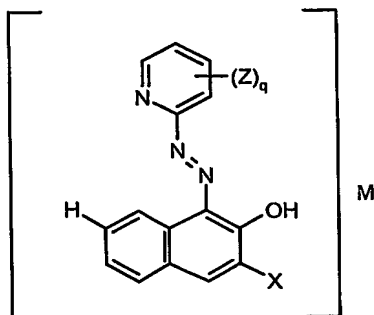
5. A compound according to any one of the preceding claims wherein W and X are each independently selected from sulpho, sulphonamido, carboxy, carbonamide, halogen, nitro and cyano groups.

6. A compound according to any of the preceding claims wherein in the metal chelate compound of Formula (1) A-N=N-B is chelated to M in the ratio 1:1 or 2:1 respectively.

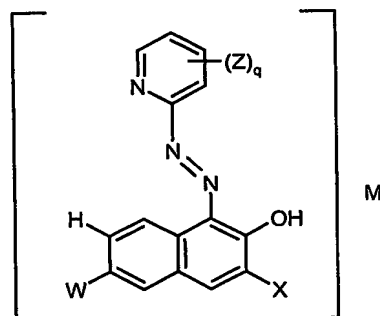
7. A compound according to any one of the preceding claims wherein M is nickel, chromium, cobalt, copper, zinc, iron or manganese.

8. A compound according to any of the preceding claims wherein M is nickel.

9. A metal chelate compound according to claim 1 of Formula (4a) or (4b) or a salt thereof:



Formula (4a)



Formula (4b)

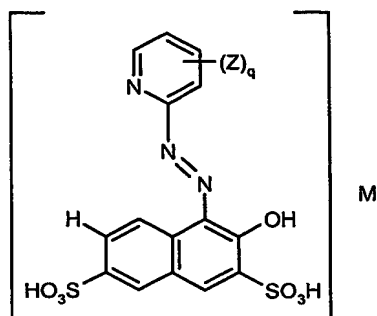
wherein:

M is nickel, chelated to the group shown in square brackets; and X and W are selected from sulpho, sulphonamido, carboxy, carbonamide, halogen, nitro and cyano groups;

q is 0, 1 or 2; and

Z is selected from cyano, C<sub>1-4</sub>-alkyl, carboxy, nitro, halo and C<sub>1-6</sub>-alkoxy groups.

10. A compound according to any one of the preceding claims of Formula (5) or a salt thereof:



Formula (5)

wherein:

M is nickel, chelated to the group shown in square brackets; and

q is 0, 1 or 2; and

10 Z is selected from cyano, C<sub>1-4</sub>-alkyl, carboxy, nitro, halo and C<sub>1-6</sub>-alkoxy groups.

11. A composition comprising:

15 (a) one or more compound(s) according to any one of the preceding claims; and  
(b) one or more water-soluble dye(s) other than a compound according to any one of the preceding claims.

12. An ink comprising:

20 (a) a compound according to any one of claims 1 to 10, or a composition according to claim 11; and  
(b) a liquid medium.

13. A process for printing an image on a substrate comprising applying thereto by means of an ink jet printer an ink according to claim 12.

14. A substrate printed with an ink according to claim 11 or by means of the process according to claim 13.

15. An ink jet printer cartridge comprising a chamber and ink, wherein the ink is present in the chamber and the ink is as defined in claim 12.

16. An ink jet printer containing an ink jet printer cartridge, wherein the ink jet printer cartridge is as defined in claim 15.